

REMARKS/ARGUMENTS

Reconsideration of this application in light of the above amendments is courteously solicited.

The examiner in the office action dated January 15, 2004 has rejected claims 1-3, 5 and 6 under 35 U.S.C. 102(e) as being anticipated by U.S. Patent 6,417,860 to Migdal et al. Claim 4 has been rejected under 35 U.S.C. 103(a) as being unpatentable over the Migdal et al. '860 patent in view of Shilling et al, U.S. Patent 6,236,405. Finally, claim 6 was rejected by the examiner under 35 U.S.C. 112, second paragraph as being indefinite. As to how the above rejections apply to the claims as amended herein, they are respectfully traversed.

Initially it should be noted that dependent claim 6 has been amended so as to correct the inadvertent typographical error and now complies with 35 U.S.C. 112, second paragraph.

With regard to the prior art rejection, independent claim 1 has been amended so as to include the following recitation:

"...a plurality of data paths providing between said first and second DRAM banks and a trilinear interpolator, said data paths being adapted to access eight texels existing in the integer coordinates and LOD mapped into a texture space of a pixel to be rendered on a display screen, such that a trilinear interpolation is performed in one clock cycle..."

It is respectfully submitted that the Migdal et al. reference fails to teach, disclose, suggest or render obvious the subject

matter of amended independent claim 1 whether taken alone or in combination with the secondary reference to Schilling et al.

The present invention applies a Clipmap concept into the relation between a system memory and a texture cache. In this regard, for example, see Figure 7. The present invention provides a new cache memory capable of accelerating the texture mapping process. Migdal et al. fails to obviously teach, disclose, suggest or render the clipmap concept between a system memory and a texture cache as claimed. Migdal et al. teaches a method for reducing the required capacity of system memory wherein the clipmap concept is applied to the relation between a hard disk and system memory (in this regard see Figure 2) by implementing it in an entirely software manner. This is not suitable for accelerating the texture mapping. Migdal et al. disclose memory architecture which comprises a mass storage device 208 for storing complete texture MIP-map and a texture memory 226 for storing a relatively small clip-map representing only selected portions of a complete texture MIP-map. Accordingly, in Migdal et al. only the texture memory 226 acts as a cache memory (see col. 7 lines 49-60). However, in the present invention, both the first DRAM and the second DRAM are comprised in and act as a cache memory.

The secondary reference to Schilling et al., U.S. Patent 6,236,405 failed to overcome the deficiencies noted above with

regard to the primary reference. More specifically, the Schilling et al. reference does not teach a first DRAM and a second DRAM which are comprised in and act as a memory cache as now claimed in amended independent claim 1. In light of the foregoing, it is respectfully submitted that independent claim 1 and the claims which depend therefrom patentably define over the prior art.

With regard to amended independent claim 6, it is submitted that claim 6 as amended defines over the Migdal et al. reference.

In light of the foregoing, it is submitted that all of the claims as presently pending comply with the formal requirements of 35 U.S.C. 112, second paragraph and define over the prior art.

An earnest and thorough attempt has been made by the undersigned to resolve the outstanding issues in this case and place same in condition for allowance. If the Examiner has any questions or feels that a telephone or personal interview would be helpful in resolving any outstanding issues which remain in this application after consideration of this amendment, the Examiner is courteously invited to telephone the undersigned and the same would be gratefully appreciated.

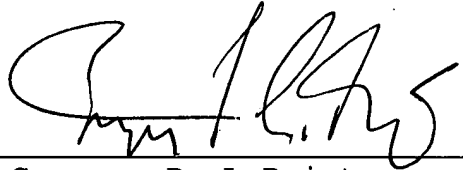
It is submitted that the claims as amended herein
patentably define over the art relied on by the Examiner and
early allowance of same is courteously solicited.

If any fees are required in connection with this case, it
is respectfully requested that they be charged to Deposit
Account No. 02-0184.

Respectfully submitted,

Se Jeong Park et al.

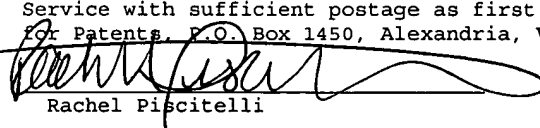
By



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I hereby certify that this correspondence is being deposited with the United States Postal
Service with sufficient postage as first class mail in an envelope addressed to: "Commissioner
for Patents, P.O. Box 1450, Alexandria, VA 22313" on April 15, 2004.



Rachel Piscitelli